

Professional and Research Practices II

Code: 42938
ECTS Credits: 12

Degree	Type	Year	Semester
4313775 Applied Microbiology	OB	0	2

Contact

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Use of Languages

Principal working language: spanish (spa)

Other comments on languages

There can be contents in Catalan or in English.

Teachers

Montserrat Llagostera Casas

Jesús Aranda Rodriguez

Prerequisites

The previous realization of the module "Professional and research practices I" is necessary.

Objectives and Contextualisation

The objective of this module is that the student was able to apply the acquired knowledge and to develop an autonomous professional or research activity, under supervision, in the work environment in which he/she is located.

Competences

- Analyse research results to obtain new products or processes, assessing their industrial and commercial viability with a view to transferring them to society.
- Carry out tasks self-sufficiently in the field of microbiology and within a work environment.
- Develop critical reasoning within the subject area and in relation to the scientific or business context.
- Solve problems in new or little-known situations within broader (or multidisciplinary) contexts related to the field of study.
- Use acquired knowledge as a basis for originality in the application of ideas, often in a research context.

Learning Outcomes

1. Analyse research results to obtain new products or processes, assessing their industrial and commercial viability with a view to transferring them to society.
2. Carefully select and apply the appropriate microbiological tools for each problem addressed.

3. Develop critical reasoning within the subject area and in relation to the scientific or business context.
4. Propose solutions to microbiological problems in different areas.
5. Solve problems in new or little-known situations within broader (or multidisciplinary) contexts related to the field of study.
6. Use acquired knowledge as a basis for originality in the application of ideas, often in a research context.

Content

This module has two typologies: professional or research practices. The student must choose one of the two.

In professional practices, the student will be integrated into the processes of production, quality control, analytical, etc. carried out in the collaborating companies. The companies and institutions in which the practices will be carried out cover all the main sectors of the application of microbiology in our society: food, diagnostics, industrial, biotechnology and environmental.

In the research practices the student will be integrated into a research group located in a university, research center or company, carrying out research tasks and initiating a research career that can be continued, once the master's degree has finished, with a doctorate. The realization of research practices in research groups that belong to the UAB or external to this institution will be proposed.

Methodology

- Preparation of written assignment
- Practical completion
- Reading articles / reports of interest
- Personal study

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Supervised			
Practical completion	250	10	1, 3, 4, 5, 2, 6
Type: Autonomous			
Personal study	20	0.8	1, 3, 6
Reading articles / reports of interest	15	0.6	3, 6
Written assignment	15	0.6	1, 3, 4, 5, 2

Assessment

At the end of the module the student will submit a written assignment to the coordinator of the practical module in which he/she will explain the work done. This work evaluated by the coordinator of the practical module will represent 50% of the mark.

The other 50% of the mark will correspond to the evaluation carried out by the student's supervisor at the company or research group, considering not only the technical skills but also other attitudes of the student.

The final mark of the module will be the average of the one obtained in each of the evaluated activities. To pass the subject, the student must obtain a score equal to or greater than 5 (out of 10) for each of the assessment activities.

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Supervision evaluation	50%	0	0	1, 3, 4, 5, 2
Written assignment	50%	0	0	1, 3, 4, 5, 2, 6

Bibliography

The student will be responsible for the search and consultation of the references necessary to carry out their work. For this the student may receive the help of his/her supervisor.

Software

No specific software is needed in this subject.